

Chapter 35

eHealth Saskatchewan—Sharing Patient Data

1.0 MAIN POINTS

Since 1997, Saskatchewan has been developing a provincial electronic health records system for patients (called the provincial EHR) to allow for the sharing of patient data among healthcare professionals.¹

Since 2010, eHealth Saskatchewan (eHealth) has had the mandate to develop and implement the provincial EHR for Saskatchewan. eHealth has created a provincial EHR through compiling and standardizing patient data from different regional health authorities and healthcare providers into provincial data repositories (i.e., data collection systems).

This chapter sets out the status of five recommendations we first made in 2014 to improve eHealth's processes to share patient data among healthcare professionals. Four recommendations were directed at eHealth and one recommendation was directed at the Ministry of Health (Ministry).

By September 15, 2016, eHealth implemented three of its four recommendations. Since our 2014 audit, eHealth has standardized data in all of the provincial data repositories, except for clinical records.

eHealth, in association with the Ministry, Saskatchewan Cancer Agency, and regional health authorities, formed the Health Information Oversight Committee (HIOC) in May 2016. HIOC is to establish, deliver, and govern an effective and efficient provincial health information system. Part of its responsibilities is to make sure future IT capital projects are compatible and integrated with the current system before asking the Ministry to fund them.

The results of HIOC's work, along with a long-term IT capital plan for the health sector, are expected to ensure the healthcare system has the priority IT resources required to deliver patient services. At September 2016, the Ministry did not have a long-term IT capital plan that encompasses provincial EHR priorities.

2.0 INTRODUCTION

Our *2014 Report – Volume 1*, Chapter 9, concluded that, for the period of April 1, 2013 to February 28, 2014, eHealth had effective processes to share patient data among healthcare professionals, except in a few areas. We made five recommendations.

To conduct this review engagement, we followed the standards for assurance engagements published in the *CPA Canada Handbook – Assurance*. To evaluate eHealth's progress towards meeting our recommendations, we used the relevant criteria from the original audit. eHealth's management agreed with the criteria in the original audit.

¹ Patient data is patient health information in electronic format. Healthcare professionals include physicians, pharmacists, nurses, and radiologists.



We interviewed key eHealth and Ministry staff regarding provincial EHR data repositories. We also examined eHealth's strategies for completing data repositories and standardizing data requirements and reviewed terms of reference, agreements, and minutes.

3.0 STATUS OF RECOMMENDATIONS

This section sets out each recommendation including the date on which the Standing Committee on Public Accounts agreed to the recommendation, the status of the recommendation at September 15, 2016, and eHealth's actions up to that date. We found that eHealth had implemented three recommendations. eHealth and the Ministry continue to work on the remaining two recommendations.

3.1 Standardized Data Requirements Progressing

We recommended that eHealth Saskatchewan establish standard data requirements for all provincial repositories. (2014 Report – Volume 1; Public Accounts Committee agreement February 12, 2015)

Status – Partially Implemented

Standardized data helps to ensure relevant and timely information is readily available for patient care. In our 2014 audit, we found eHealth had identified key data repositories, to include patient data related to:

- › Lab results
- › Drug information
- › Diagnostic imaging/reports
- › Clinical records (discharge summaries)
- › Immunization information
- › Chronic disease information
- › Synoptic reporting²

eHealth has set standard data requirements for all the data repositories, except clinical records. As of September 2016, 3sHealth was leading a transcription project. Once completed, standard electronic clinical reports (e.g., admission histories, discharge summaries, progress notes, surgical reports) are expected across all regional health authorities, which eHealth can then make available through the provincial EHR.

Without standardized data compiled into the clinical records repository, physicians may not have the necessary information to make the best decisions. For example, if an RHA does not include hospital drug information in its discharge summary, a physician in another location later treating the same patient may prescribe a conflicting drug, potentially with adverse health consequences.

² Synoptic reporting captures data items in a structured, standardized format, and contains information critical for understanding a disease, the technical details of a procedure, and the subsequent impacts on patient care.

Establishing standardized data requirements in electronic format for all repositories would ensure relevant and timely information is readily available for patient care.

3.2 Monitoring and Addressing Data Gaps

We recommended that eHealth Saskatchewan define strategies to identify and collect key patient data required for provincial electronic health records. (2014 Report – Volume 1; Public Accounts Committee agreement February 12, 2015)

Status – Implemented

The completeness of the provincial repositories is contingent upon the completeness of the sources of its information and the willingness of those with patient data to share it. **Figure 1** summarizes the availability (through the eHR Viewer)³ and completeness of patient data at September 15, 2016.

eHealth has developed a five-year priority roadmap (2014-2019). The roadmap outlines when eHealth plans to connect each data repository to various health care providers (e.g., regional health authorities) and when it expects new initiatives to occur. eHealth updates the status⁴ of initiatives each quarter, and revisits the priority roadmap annually. **Figure 1** also outlines whether eHealth is planning to address data gaps.

Figure 1 – Saskatchewan's Key Provincial Repositories as of September 15, 2016

Patient Data	Available?	Complete?	Plans to Address Data Gaps
Lab Results	Yes	Yes	
Drug Information	Yes	No – missing hospital drug information and oncology drug information	Pilot in place for hospital drug information at Saskatoon Regional Health Authority. Oncology drugs are on the roadmap for 2016-17.
Immunization Information	Yes	Yes	
Diagnostic Imaging/Reports	Yes	No – missing images and reports from private clinics (approximately 30% of images)	Pilot taking place in one private clinic. Roll-out in two private clinics planned for 2017-18.
Discharge Summaries	Yes	No – only includes Saskatoon Regional Health Authority discharge summaries	Transcription project underway.
Clinical Encounters ^A	Yes	Yes	
Chronic Disease Information	Yes	Yes	
Synoptic Reporting	Yes	Yes	

Source: eHealth Saskatchewan documentation and interviews.

^A The Clinical Encounters repository allows physicians to see if their patients have received care in hospital, through the eHR viewer.

³ The eHR Viewer allows authorized users to view patient data over the internet.

⁴ eHealth classifies each initiative as completed, in progress, in queue, in planning, dependent on other initiatives, or delayed.



3.3 Governance Structure Established will Facilitate Provincial EHR Development

We recommended that eHealth Saskatchewan obtain responsibility from the Ministry of Health for the drug and immunization repositories to facilitate developing the provincial electronic health records. (2014 Report – Volume 1; Public Accounts Committee agreement February 12, 2015)

Status – Implemented

We recommended that eHealth Saskatchewan obtain responsibility from regional health authorities for the diagnostic images and reporting repository to facilitate developing the provincial electronic health records. (2014 Report – Volume 1; Public Accounts Committee agreement February 12, 2015)

Status – Implemented

eHealth Saskatchewan is the system owner of the provincial EHR repositories. Advisory committees and working groups are in place for each repository with membership from eHealth, the Ministry, regional health authorities, Saskatchewan Cancer Agency, regulatory bodies, and pharmacies. These repository advisory committees and working groups are responsible for providing advice and guidance for the projects related to the repository they are responsible for. A provincial eHealth Information Advisory Committee (eHIAC) is in place for the shared trusteeship⁵ model. eHIAC is responsible for providing advice and guidance on data-sharing agreements, service and access policies, and security and privacy concerns.

On May 19, 2016 eHealth, the Ministry, Saskatchewan Cancer Agency, and regional health authorities agreed to form the Health Information Oversight Committee. HIOC's membership includes eHealth's CEO, representation from regional health authorities CEOs and/or Saskatchewan Cancer Agency's CEO, and a representative from the Ministry of Health. HIOC is responsible for prioritizing IT investments and making recommendations. The group is meeting regularly (e.g., monthly) and establishing a decision making process.

The formation of HIOC is expected to facilitate shared responsibility between eHealth and its partners (e.g., Ministry of Health, regional health authorities) in making shared decisions impacting provincial EHR.

⁵ The Health Information Protection Act defines a trustee as a person or organization who has custody or control of personal health information (i.e., patient data).

3.4 IT Capital Funding on a Health Sector-Wide Basis Advancing

We recommended that the Ministry of Health allocate IT capital funding based on a provincial strategy for electronic Health records. (2014 Report – Volume 1; Public Accounts Committee agreement February 12, 2015)

Status – Partially Implemented

The Ministry continues to fund IT projects at eHealth, regional health authorities, and other partners (e.g., Saskatchewan Cancer Agency). It expects the formation of HIOC to facilitate a centralized approach in enhancing the provincial EHR. For example, HIOC is responsible for ensuring future IT capital investments are compatible and integrated with current infrastructure, prior to recommending the Ministry fund them.

The work of HIOC, along with a long-term IT capital plan for the health sector would help ensure that the healthcare system has the priority IT systems it requires to support the delivery of patient services. At September 15, 2016, the Ministry did not have a long-term IT capital asset plan.

